



39. 7 miles west of Goshen Ohio.
40 { Spalding Spgs
41 { Stanley & Keeler farms -
 Gatch am. Miss.
42 Shelds on all
43 Yeager, S Dept Jones,
44 Frankfort
45 Jackson & N. Davis Oliver
46 Bonham SW of Frankfort
47 McGinnis, Bowling Green -
48 49 Cobble eggs
50 E of the Courtland, Cincinnati
51 Sugar Creek
52 Watson, Franklin
53 54 Autumn
55 Silks. Red gerwra
56 Cyrene
57 Way on Jacksonville rd
58 } Devonian rocks
59 } Lagoon to Henderson
60 } farms,
61 Coal on Harley-Henderson
 farm. Oxford Cove
 Shiel, Gatch am
 Spalding springs.
62 Abe McF and land
 Hudson River about
 Geologic Devonian
 Judge Spalding Den.

1. Lebanon to Monroe
2. Monroe to Lebanon
3. Lebanon to Monroe
4. Monroe, Coniaage.
5. Pleasant Plain, Newville
6. denim in the valley
6. Marathon, Decatur, Heath
7. Heath, Decatur, Ada Run
8. Fairview, Grass Valley
9. W. on Chester
10. Carmel
11. Washburn Hill & slate Hill
12. Stringtown, Point on Ruby Fork
13. Caves N to Russell & Bear Mills
14. Carmel, Russell Hill, St Hwy No
15. Janning Creek, Random school
16. Sinking Springs & East
17. East to Ogallala on Peetles
18. Peetles
19. Peetles
20. SW of Sinking Spring
21. Cedar Chapel, SW of Sinking
Springs.
22. Crookspur, SW of Sinking Spgs
23. W of N end of Sinking Spgs
24. Pottery Mill, Barnbridge
25. Barn bridge
26. Barn bridge
27. N of Barnbridge, Leesburg
28. New Mexico, Snowville
29. Latham, City of church
30. NW of Hillsboro
31. W of Hillsboro Berryville
32. Town of Berryville
33. Berryville to Harriett
34. 35. Harriett, NB of
36. NE of Harriett, Gilly Hill
37. Hillsboro, Sam Luther
38. Liley Hill
39. Sattlers

1

Lebanon,
 $\frac{1}{4}$ mi N of Symmes
 boundary line.
Dianthus retrorsa is
 8 ft above creek, - about
 780

Lebanon.
 From hotel 2 mi E on
 Washington road,
 where creek bends north
 SE of 767, on east side
 of $84^{\circ} 10'$ vertical line.
Retrosa at 765 usf, S.

Lebanon
 $2\frac{1}{2}$ mi S East Washington
 school road.
Aster at 805 usf S.

Lebanon,
 SE $3\frac{1}{2}$ mi to spur 892
 Then E 1 mi to W branch
 of Hall's creek.
retro *Leptidea* at 805
Dalmatella, Pl. pondaria

Monroe
 Horse feed — — 35 ct
 Drove myself &
 driver at
 St Charles Hotel — 1.00

Morrow.

1 1/2 mi N, then 1/2 mi W,
+ 1/8 mi N of Halls
creek,
Dunite intrusion at
about 810 USGS.
At about 780, on W
side of bridge, in brown
Anhydrite, is strongly
rippled limestone
stone with rippled
surface about NNE.

Lebanon

4 mi S E, to Washingt-
ton school. Then 1/4 mi
SE to small branch
in bed of road.

Petroaea at 805 USGS

Stubbs Mill
1/2 mi N, then 1 mi W
to road corner.

Petroaea at 820 USGS.

Lebanon

2 mi S to corner 898, then
1 mi W + 1/8 mi NW to
house.

Petroaea, Leptarenia,
Dolomites at 830 USGS

Lebanon

5 mi N of town at
southern edge of town.
Modular layer at top
of Gneiss = 5 ft
below bend in road
where road always traction
line turns off NE
in approaching town.

Smith Lebanon S to
Hopkinsville, Farm Sedge
of hillside 1 1/2 mi E, at
road corner 817.

Top of hill Anhydrite full of
Platystrophia praeversa =
802. Above this, the
retrograde should form at
850 about. I doubt
whether this actually is
present in hill 1/2 mi E of 817

Morrow

2 1/2 mi SW to Creek
Bridge school road,
From school 1/2 mi NW
then SW to second
week crossing.

Petroaea, Septaria, Lyng
Cylindera, at 860
USGS, S of road crossing

From last locality
turn West, about $\frac{1}{4}$
mi E of road corner
826; in N side of road
Platyceratopis sand
Cyclomaria at 835.
Retrace perhaps at
860, as value no 3 cm
galls.

Morris,
4 mi S, straight line,
to road corner $\frac{1}{2}$ mi
W of Rossburg, then
 $\frac{3}{4}$ mi SW to break $\frac{1}{3}$
SE of 882, on other side
Retrace & Septaria
Dolomella at 848
USGS.

Craigie

$\frac{1}{2}$ mi SW, then $\frac{1}{4}$ mi W
creek. Then E up creek.
Retrace, Septaria
Cyclomaria above
Platyceratopis from terrace
11 ft above creek at road
corner = 865 USGS.

Pleasant Plain

From W along RR, then $\frac{1}{3}$
mi NW, $\frac{1}{8}$ mi SW to
cemetery, then W down
stream.

Retrace at Yestadine at
860 USGS about.

Newtownville

Henry Strader's

boarding house.

Newtonville station
7.52. 9.52, 12.52 West
7.00 9.00 11.00 East

Sedentia

On creek SE of town and
NE of station station
No exposure of any kind
seen here.

Newtownville

W of town, at edge of town.
Retrace at 880 USGS.

Monterey

SW of town to Patterson
town, then NW along
creek road to road
leading N to point at
prob. W of 887 corner
Lynx top at 840 USGS.

Marathon

S E of town $\frac{1}{2}$ mi to
East Fork of Little Miami
River.

Where road turns N
parallel to W bank of
river, *Lynx* with
Cyclomena is exposed
at about 870 USGS,
but no fossils occur in
5 ft which probably belongs
to the retrograde horizon
although the lithology
of the rock is all typical

Decatur

5 miles, toward Heitt,
at house on W side of
road, between letters R + D
in ROAD, 1 mi N of Heitt.
Strophomena concavata
+ *Streptelasma* at 890
USGS.

Dinner at Heitt.

Myself driven + home-
field. 1:50

Heitt store

N of Heitt.

Stroph. Concordia 20 ft
above *Leptaena* at 840 USGS

Heitt,

South 1 mi where road
from S E turns sharply
S W.

Strophomena concavata
+ *Streptelasma*,
at 900 ft S. W. of road,
Possibly in place.

Decatur

at Cloud hotel 840 m

Decatur

E to Marshall Creek.
Strophomena concavata,
in creek on S side of bridge
at 796. From this *Leptaena*
layer is estimated at 773
USGS above.

E to Ada Run

at *Aphistoma* on cordon
2 in (not true) = 55 ft
above creek at bridge. ~

$$55 + 760 = 815 \text{ ft for the}$$

Strophomena

Leptaena at 755 + 55
in the large boulders just
above this level, were
running NE

E off Fairview $\frac{3}{4}$ mi
to Hills Creek.

Strophomena ventralis
& Ammodonta
casei, at level below
bridge = 765-770.
From this reference
calculated at 705-710.

West of Russelville
less than 1 mile,
to road crossing
the N. Y. creek
Lysm. below mouth
of south branch and
Leptidea & dentata
above mouth at

Russelville

1 mi N, $\frac{1}{2}$ mi E to
NW fork of Eagle, then
up stream short dis-
tance & up fork
eastward.

Left area, drift at a
above Lysm., at
870 n.s.G.S.

Manchester,

Clayton road branching
off from Bentsville
road NW 1 mile.

Leptidea & dentata
at about 644 U.S.G.S.

With Strophomena
concordans further

w. express ct. — 29

Dayton Wyoming 34

Harrisburg Wilmington 1.00

Dinner Wilmington 75

~~Express charges~~

B over checker letter

Wilmington to Hillsboro 1.11

My accounts \$0

Hillsboro map

Bainbridge Black bridge map

Hotell bill

Carmel dinner 2.00

McCaffrey

H A Pavley 5226 Hunter
Ave. Norwood Ohio
Via Samuel Coyle

Carroll

$\frac{1}{3}$ mi E to 2nd house
in N side of road, then
S to gully. Black
shale down to 920.

at first house W of

Heads Branch, on S side
of road. $\frac{3}{8}$ mi E of Carroll
tip of West Union at 900

Carroll.

40 mi W, then $\frac{1}{2}$ mi S,
then 3 mi SW, at highest
point along road.

Black shale at 990.

$\frac{1}{8}$ mi further SW, then
E up first roads
to abrupt turn in road.
Black shale at 1020.

From last locality $\frac{1}{4}$ mi
SW to Black shale at 990
and above.

Carroll

1 $\frac{1}{2}$ mi SW in straight
line to first road
turning off directly W.
Black shale at 1000.

Lower part of last
exp. rock is greenish
to be Blanton 970 ft.

Washington Hill

At road corner directly
W of line of Washington Hill
Black slate at 1000

N of this road cross the
Blentongy probably
comes down to 980.

West of last locality
the Blentongy white
clay goes down to first
creek = 980.

West of creek Blentongy
shows up at 980

From corner 970 N toward
Franklin Branch the
Blentongy shows up
down to 960.

Tip of West Union at
945 just S of Franklin
Branch

South of road corner 970, $\frac{1}{3}$
mile, as far as next
road corner, Black shale
& Blentongy shows up
presently as far down
as 1020.

Road corner half way between
945 corner & State Hill
School. Top of West Union
at 1005.

Eliot Blackwelder
Has left Univ of Illinois
Gone to private less onch.
Twenk fel gone to
Anti-crit' again.
Charles Stirling Adelaid
South Brookfield dead
Stringtown
 $\frac{1}{2}$ mi N, at road
Crosses by a th. Kettler ss. at
1040, rock white brown
Stony, which may be
Miner.

Peterson School
 $\frac{1}{4}$ mi E at house
Mg al varss at 1020.

Point

$\frac{1}{4}$ mi E, $\frac{1}{4}$ mi N to
Rapids Fng, then E 1 mi
to where lane turns off N,
Beyond this $\frac{1}{10}$ mi E,
Here base of kbr. black
shale by name is at 845
and top of Miner by the
same is at 835.

Points

$\frac{1}{8}$ mi E, S of river in S
of Point creek.
Miner up to 850

Caves

$\frac{1}{2}$ mi E, along road
going south
West Minn or Miner
at 860

Caves

$\frac{1}{2}$ mi W on highest land
east of house on N side of
road.

Black shale on Miner at
about 875

At next house West,

$\frac{1}{3}$ mi W of Caves, Black
shale rests on Hillstrom
ss. on West Minn or Miner.

Caves

$\frac{1}{3}$ mi west. Head of first
large gully w. of the Caves,
off of West Miner at
890 feet.

Barrett Mill

$\frac{1}{2}$ mi NE, before reaching
Caves 935.

West Miner as far up as
890. Top water 1000 ft.

Beaver Mill

1 mi E, W. of Heads
Branch.

West Miner up to 860

Carmel

$\frac{1}{2}$ mi N.

West Main up to 940

Barrett's Mill

3 1/4 mi SE, $\frac{1}{8}$ mi N W
of Carmel 899.

Top of Main at 880

Ernest Black

Shale at 900.

Stultz m.

Bridge SE of road cross 881

West Main with bridge to
meets. 855 about

West road cross 881.

Black shale at 860

To north or west, just
beyond house on N side
of road. West Main
up to 865

Washburn shale

E. J. = West Main up to
886.

West of Washburn
school before reaching
creek crossing.

Main up to 880

Road cross 949

at stone $\frac{1}{2}$ mi E of
cross.

Main up to 910

Tarzigan Park.

From road cross NW of
road Tarzigan $\frac{1}{2}$ mi,
north to

Maine at 960 - top.

Black shale at 960 & 970
farther south.

Tarzigan Park

SW of road cross.

Here is black clay-alumina
beneath Elm's Black
shale.

Then NW to road cross
and S with $\frac{1}{8}$ mile to
Main up to 935.

Davidson school.

Immediately N of school
Hilltop ss. in place
at 935. exact.

Top of West Main is
about 10 feet above
sandstone about 2 ft
thick

Farther north West
Main at 915 just
before Kerby home.

Sinking Springs.

1 mi N. then east from
near road corner 845, $\frac{1}{3}$ mi,
Monroe up to 881,

$\frac{2}{3}$ mi E of Sinking
Springs side - Block
shale at 900.

Same road as above.

$\frac{1}{3}$ mi E of Sinking Springs
side.

Monroe up to 830
in the Block shale with
10 feet above.

2 mi E of Sinking Spring
road, where creek road
turns up hill SE.

Monroe up to 813.

Cross 741

$\frac{1}{8}$ mi NW. Monroe = 790
at top.

East of cross 741

Top of Monroe at 790 for
 $\frac{1}{2}$ miles then drops to
775 at gate of lane
on N side of road
at 1 $\frac{1}{2}$ mi E of cross
741

Norman school

Valley 1 $\frac{1}{2}$ mi W.

Top of Monroe at 785

East of Norman school
the top of the Monroe
drops to $\frac{1}{8}$ mile to 760

$\frac{1}{8}$ mi W of corner 714
at junction with
Pebble bridge Monroe
is seen at 740.

Byington

effeminate Sunfish.

return of the 655

3 $\frac{1}{4}$ mi E of Byington

Disease city E of hedge

Monroe up to 655

Pebbles - Bishop bed

Diaphanostoma magnificum

Camptochaia neglecta

Schistostoma pinnatum

Schistostoma pinnatum
deflected in meadow area

Camptochaia wadsi

specie not assigned

Hypoleptes diffusus

Whitfieldella leading to
cyprinodon

Dalmatia leucanthemoides,
Sp. pl. a, with a short hairy
stipe and simple fol.
& stems: rad. thin;
Certh. red. or, unulated
but no nodes on the
annuals.

Rhytidophlebia monogramma
Lepidium subnudum
Zalenanella elegantula
Carex arctaginea long & flat,
but not thick and
probably Pat. Willian
specimen.
Whitfieldella cyathiflora
long & narrow typical
whitfieldella form.

960
1270
1230

Brassfieldia
Leptaeus stenotrichalis
Orthoceras
Obeckia crenata
Oxytropis heterophylla Gussie.
Dalmatia elegans
Platycephalus plicatus
var.
Certh. It type locality Borden
Agassiz woodswain occurs
as types in the chesty
Brassfield. The types
were not obtained in
the layers beneath the
chesty zone.

Cret. Orchard
Dentaculites
Chonetes norvegica
Leptaeus stenotrichalis
Streblostella sulphurea
Whitfieldella anomala
Pterinea emarginata
little mud flats on
red colored slopes are
numerous.

SW of Sinking Spring
W. H. Adams locality
Thin clayey layer

14 feet { massive
cemented limestone
is the interval between
5 ft indurated clay rock
46 $\frac{1}{2}$ in total thickness.
bedrock.

The thick fossiliferous
Benton horizon occurs
between 5' & 6' ft above
base of Benton section,
East of Homestead locality.
65 ft Benton from base
of Benton to base of
Circeidial rocks as
at quarry west Pueblo.

12 ft massive cherty
limestone, going up
11 ft angular limestone
it may be a bed or
lower above going up
20 ft, interval not
by 30 feet going up
7 $\frac{1}{2}$ ft more going up

cedar cleaved N³⁰W 2 $\frac{1}{2}$ mi W. 2 $\frac{1}{2}$
W. end of Middle Forky (21)
(2 ft Donaldson shale, cc,
11 ft interval
Lend of house spread 905
1 ft whitish l. bentonite
by other species like
Nodules, grains of
Strawberry sand.
24 ft massive lime? with
103 shells
14 ft whitish shingled bed
3.5 ft shingled bed
2 ft solid Benton cherty
20 ft thin shaly Benton
27 $\frac{1}{2}$ ft. Coal bed
road junction 799
SW of Sinking Spring

Small celled & rounded
Garnet porphyry
21 ft fractured - small
16 $\frac{1}{2}$ ft upper part more solid?
11 ft massive rock.
15 ft massive coarse grained
14 ft upper Benton
5 $\frac{1}{2}$ ft cherty fossiliferous beds
13 $\frac{1}{2}$ ft massive Benton
road edge.
2 $\frac{1}{2}$ ft massive Benton
5 $\frac{1}{2}$ ft indurated clay rock.

22

N of Crooked creek,

Sinking Spring road.

2 ft. carboniferous limestone

3 ft massive limestone

4 ft clay shale.

15 ft. massive limestone.

SW of Sinking Spring, at
Homesteads locality.

Both ridge and base

of Bushy east of bridge

are 21 feet above

creek (= 725 ft above sea
level) = 746 ft from

bridge level

0 of 15 ft indurated arg. layer = 762

Gingulites = 27 feet

above bridge level 773

= 755 ft from bridge

37 feet above bridge massive
limestone, whitish, with
Cladopora near base
of mound. 78358 feet to top of massive
ledge. 80464 feet = base of next
massive l. ledge 810

23

73 feet to top of massive
limestone l. which
may be base of m. 81978 ft. Base of m. cliff
much bedded 82496 ft to top of m. which
Halysite nexus 842
small yellow Fossilite
Stromatopore.

First road N of last exposure

16 ft above bridge is
richly fossiliferous
cherty horizon.Bridge = 758 + 16 = 774
for Gingulites.Base of Bushy over
indurated clay layer
at this road cutting
1/2 mi N of Homesteads
locality - 755Going E from bridge 758
the corner of mine a rock
with Cladopora begins
at 784This corner glorified
rock is exposed on

limestone as far as
as 792;

Interval without effort
ascend up to 799
Bishop bed rock
comes next.

At next level 807
there is a deposit & a
more coarse grit mixed
large.

At next level there is
a fine grained lime
at the top that in
which I found
Pentamerus else-
where. 810.

Next up to brecciated
rocks 822

White limestone, in
part dense, and in
part brecciated at 844 ~~844~~

Highest exposure: 849
Top of sand - 854
4165
165

West of Porters Mill.

Road corner 853 B. limestone
Metacalcium 844
Top of bluff 837
Base of projecting ledge. 829
Cladipinace, 819-823
Base of l. exposure 816
Bridge at Mill 801

East of Porters Mill.

Opposite house 860
Base of limestone rock. 843
Top of shaly gray rock. 838
Base of rock above face. 834
Top of talus 828
Base of massive l. 817 Cladip.
Base of tal. exposure 811
Bairbridge Ohio
Quarry $3\frac{1}{4}$ mi S E of town
center.

Top
1160 Sunbury exposed 12 ft.
1148 Berea exposed 14 $\frac{1}{2}$ ft
1134 Bedford + interc., 105 ft.
(10 ft. Clay at base of Bedford)
1030 Black shale calculated 290

Bainbridge 1 1/2 mi S.
Jester Hill section
Silty shale = 18 ft
thick.

Purpleish clay shale
about and from 1245
to 1220 and occurs
also, possibly by slipping
down to 1170. This is
the purple and light
green shale in the
Cowley shales area,

Above 1245 to 1300
is considerable thin
sandstone - clay along

Wavy carbonaceous

Greenfield 245 PM. Hills
7.38 AM East
9.38 East

Bainbridge
Monroe RR station,
Monroe along RR
N of river above
tide level.

Cut crop in creek S of
Humboldt station
about 100 yds N
at least 3 of houses on
E side with good
Lane leading off
N of house eastward

N of Humboldt about
a mile; Monroe
in creek W of RR

Fruitdale, thin road
crossing,

Yesteray, 1 mi E at
anticline on creek N of RR
Brinoidale & Lille

Small called Farnites
Ladysmith

Small reddish ostracodes
Platystridium with 2 rows
rows and 7 or 8 on each
side of rows

Rhynchostrea like form
with 2 lobulations only
in fold.

Leptamer

Specimen for transverse oblique
comulus rapidly enlarging

Base of Lilly member.
 6 1/2 ft transition rock, indurated & clay layers interbedded increasing to 12 ft upstream
 Probably an unconformable
11 ft. shaly argillaceous
rock, - west of Bishop's
creek.

The Lilly member is massive here, coarse-grained and with clay lenses and all fossils found at the outcrops exposed.

New Vienna
 Snow Hill, N 1 mi.
 Then NE 1/2 mi to
 Grassy quarry.

Small-celled Syringites
 as at Cedarville, gray
 sandy field

Ceratostomites, few
 other modes as at
 Springfield.

Barrandella ventricosa
 The Striostrodes

with confluent
 cell septal striae
 on a more middle
 surface as in Devine
 &c. formation.

Swisshelm Pebbles, O,

Munroe at Latham

jnt below mouth of
 Grassy Fork, about
2 feet above creek level.

West end 1 1/2 miles
 W. of Piagah church
 road.

Lyell's
13 1/2 ft shaly intervals.
Oithia flabellites in
Moraine limestone

West of Piagah church,
 W. of Turkey creek fork,
 8 ft above base of B-2 Peoria
 bed, 1 specimen lost but one
 near - place.

11 ft above the last.

→ Oithia flabellites c. 890

B 16 ft on windblown 895

10 ft interval Bishen
 creek 865

Hilltown,
Wilmington road
1/2 mi S E of Dennis Chapel
Pentamerus in situ at
1150. with craggy
granulate lithology
now grayish immediately beneath,
stromatoporid with some
old brachiopod stone
in top. 7 ft. downward
also in some bed - Helicites
and tabularia, stromato-
poroids, small celled
Favosites, large celled
stems, *Cerithioplaxia*,

Iron School.

3/4 mi S E is Pentamerus
Almwood 1152

SE on E side of pike, 5
ft. tanish rocks with
w. clayey soil toward
toward base, in
checking orthocerous
lites, Stromatopor.
small celled Favosites
Helicites in test structures
as at locality
described above

This *Cerithioplaxia*
occurs on road
west of Our Lady
Church, 3 miles of
Marshall's 3 1/2 mi.

Further S E in field
E of road several
hundred yards to
Bisher, no fossils.
1 1/3 mi S E of Hilltown.
Bridge S E, up pike,
the very short tip of
Bisher occurs from
1100 to 1120 ft. abmt.

Hilltown

1/4 mi from where
Denville pike leaves
town, S of pike
1120 = base of Pentamerus
layer at base of cedar
hill

Bedrock, straight east,
1/2 mi E. Top of platy
Chert, at house & road. =
1000. n.s. & S. end
from this point refer-
ments occur up to 1040.

This should carry the section up into the lower Cedarville but none was identified with certainty.

W of Berryville the elevation reaches 1100 ft or 60 ft above the top of the cherty Bishop.

1 1/2 mi E of Berryville the West Union Creek bed contact is at 930

1 1/2 mi E of Berryville on E side of same creek as last locality,

The West Union Creek bed contact is at 912

at 1 3/4 mi E of Berryville the West Union Creek bed contact is at 905 with the creek bed being at the horizon at 960 ft which I can

not account

Cladopora occurs in the south 2 miles E of Berryville where Valley heads in from the south west

Strata open to do are common 3 mi E of Berryville, when road turns off NE;

Hartlett, straight N to neck, 1/2 mi N of Creek bed sand but exposures in valley are gravel.

Hartlett SE to where main road turns straight south. Here lane leads off E to old abandoned house on Middle Fork.

SE of house, in valley the Bishop is underlaid by 1 m limestone along which are 3 wif. Spring springs, at 825 about.

Ways this house
the whole hill
side is full of
unworked rocky
fossiliferous rock
re worked by me as
lithology for the pres-
ent.

Harrowell 2 miles to
964 elev. Then east

to one Hillhouse stn.

964-964 Stromatopores

964-958 crinoids

958-952 $\frac{1}{2}$ hard limestone

Holzsiites max is a large
Stromatopore, with

952 $\frac{1}{2}$ - 952 Bolidia

l. with Stromatopore

+ Pentamerium with

{ same, at 952

{ Stromatopore & trilobite,

Pentamerus. Several

942-949 Rock similar

lithology closely to

Pentamerus rocks

Lithology 949-943 $\frac{1}{2}$

with cladopora

well bedded at base

to fossiliferous clay
Atypa setosa etc.
Grylliella.

943 $\frac{1}{2}$ - 932 Sandy
shaly clay with
Cladopora +
Grylliella small & large
bedded

932-930 Mason
gravel on limestone
with Littorina & Globularia
+ large small called
Furrow shells & Stromatopores
tipper. same as on
hillside west of
house reached by
going from south
end of Harrowell east
1 mile toward Middle
Branch.

930-925 not exposed

935 rock with large
globular Stromatopore
bed in place.

925-905 Same crinoid

grained lithology rock
as above

Then on E. side of
the main bullion.

Cyathophylloids + 2 digenites
5' ft. Silicified limestone
very abundant here.

11 ft. arg. l. with sil. sandstone
at top.

3 ft. hard Liley limestone
10 ft. sandy shaly clay.

16 ft. coarse grained l.
many large Fornites &c
11 ft. coarse grained l.
no large Fornites,
E of Hillaborr on
Liley hill.

Top of road at cop. line
5' x 2 ft. brownish limestone
4' x 2 ft. well exposed

6' x 2 ft. of bituminous
16 1/2 Pentameris in bitu-
minous limestone,
greenish mass = 4 ft. thick
E of Cooper's Hill.

5 ft. Pentameris ls
of light tan color

Plainview school, 5 mi
N of Goldsboro on Carytown
Road

Selvin house 1145
3 1/2 ft interval,
2 ft bituminous l. coarse
9 ft Pentameris thick 1104
Same another 1/2 mi N
top Burying Ground Hill,
House 1145 and top of
road to 5 ft. mottled limestone
House 1170. Same limestone
interval 66 ft.

Pentameris layer,
Cut out at 1104
Liley. Bituminous, coarse
grained, cross-bedded &
full of claddens. Also
one good bed of flat shells
Strong eastward dip
of Liley. Steep dip
to nearly horizontal
fracture surface.

Section in drain creek from
at ground level up through
SW 1/2 rock quarry, then down
through 5 ft.

Base of Liley quarry.
64 ft interval,
2 ft nicely fossiliferous
10 feet basal Birkie

My type locality for
Birnia fossils occurs
first before reaching
fork on going south.
Wind down stream.
It is on E side of
bottom.

Hilltop Hill,

at top of hill on road

Hilltop 20. from.

Interval 8 1/2 ft.
base of Cedarville bed
Yellow clay - 3 1/2 ft
Yellow s. - 12 1/2 ft.
Int brd. 64 ft
Best fossil bed 2 ft
Black Birnia 10 ft.

174 1/2 ft. - Crat
Orchard to Hilltowns.

92 ft. - Crat bed down
to cedarville.

Saylor collection at
Wilmington College
Includes brachy cepha-
lons, heads.

had 8 1/2 inches wide
and 3 3/4 inches long
from just above
upper Hebertellia in 2nd fltr.
as shown by Edwards
stony Dederimus,
richardsoni,
also large impression
of same. Plane for
figuring.

PILLOWS

nestch eggs

New London 2 mi.
W, a road turns off
N to Buffalo cave.
SE of road corner,
on land of Ida
Brown, only a few
hundred feet SE
of road corner, is
the pillow structure
locality on south
side of East Branch
of Dove River.

Spalding Springs
2 1/2 mi W of Spring,
on D.J. Stanley farm,
W of house, 1/8 mi down
along west side of
creek, in bluff.

Other ground Dov. 20

Massive

Farmers	massive
spale	slaty
sp. fine	greenish
moderate	moderate
6"	6"
5' massive	4 1/2 ss'

1/2 mi S of section line
Sp. fine & cherty occurs in
top of Dov. l. moderate
Dov. ss.

Spalding Springs

1 mi due W, on
O'Reefe farm, SW
of house.

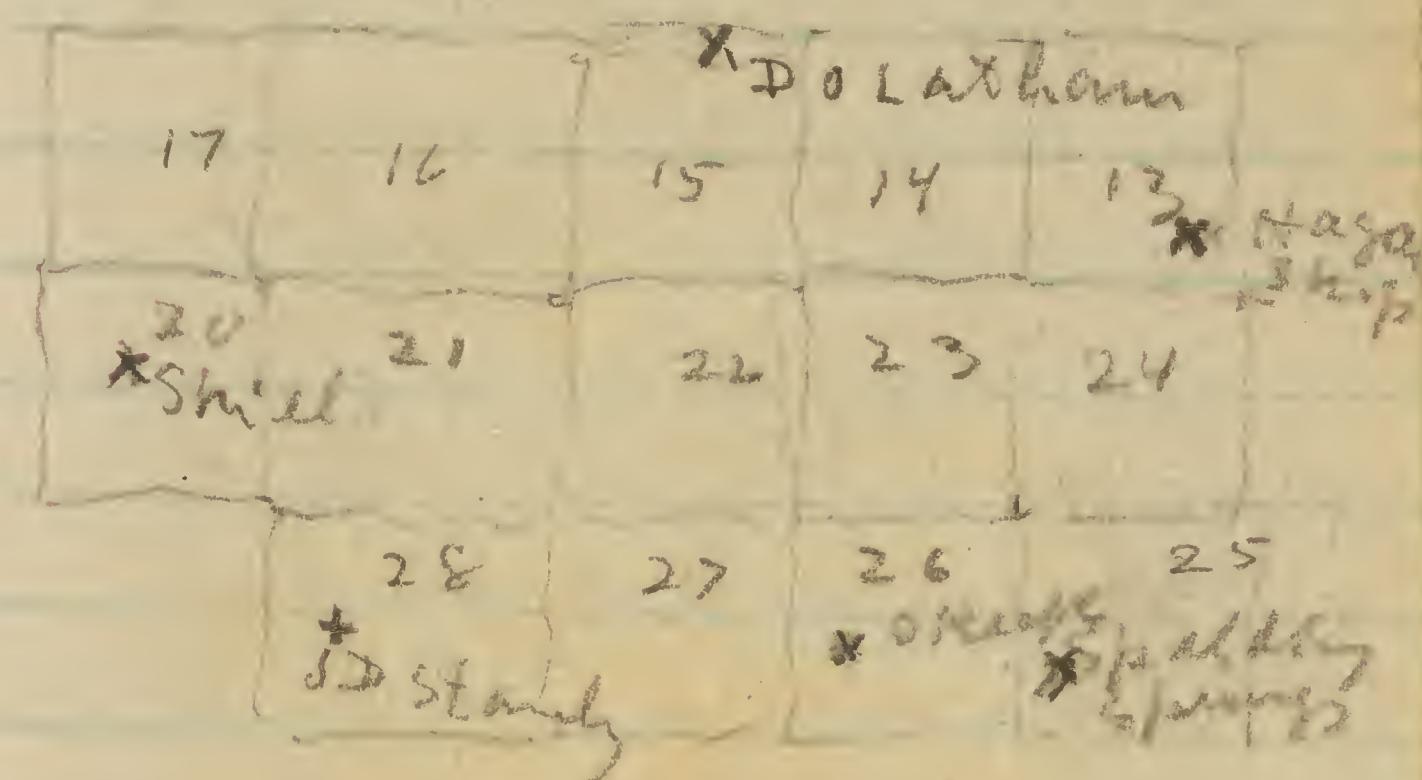
Sp. fine common
within 10 ft of
base of Dov. ss.
in cross bedded
limestone.

The D.J. Stanley locality
lies 2 3/4 mi exact due
W of Spalding Springs.

The Shivel Dr or coral
locality lies 1 1/4 mi
exact NW from the D.J.
Stanley locality.

The D.O.L. at the corals
locality is 1 mi W of
Spalding Springs and
thus 2 3/4 due North.

This suggests a thin dip
by the top of the
Devonian section in
a NW direction, with
short a very added
to the top.



Sluiceds 1/4 mi East,
South of Blackley
house.

8 ft Devonian l. massive
← Main Acorularia
horizon

17 ft Devonian l. massive.
3 ft, Favonites branching,
and other Dev. l. fossils
5 ft. Devonian sandstone.
← Basal sandy horizon
at top with Devonian
Spirifer, bivalves
Favonites, Atrygon etc.
Fine grained Devonian
(No fossils found in it.)

From the Sluiceds coal
locality go 3/4 mi. E
to creek where so
at top of hill with
is about 9 feet
ago I found Receptaculites
at top of
hill massive and
Devonian l. above.

Yeager farm. 5 1/2 mi S E of
New London, Upper Platte.
Petrified large Crinoid
form, *Spirifer filimanus* \nearrow
Piersonella (N of Spencer Creek
Cithariscinoides \times
Cystalites like small \times
ornatus
Subulites or *Priscipora* \times
Zygopora small recurvirostra \times
Hornoplana \times
Coronella "fimbriata"? \times
Ostacostomites sinicus \times
Terebraria punctostriata \times
Clathruspila \times
gasteropod with
flat side, concave \times
Lippon longiformis \times

Stephen W Jones
1 1/2 NW of Frankford
On creek bed, just to
a dirt road below
top of cliff
Rhynchonellids more
small from of above

Frankford, Belvoir RR
level, E of town.

Dalmatella vogata?

- * *Aeranthos* on talus 20 ft down
- * *Peltandra* - slopes and
- * *Strophiolema* in curvata
- * *Peltandra* cc. 12 ft down
- * *Rhynchium* more or less bare
- * *Dennstius meadsi*

at and above RR
level is *Receptaculites*
common.

Frankford, N 1/2 mi. NW
E to school at exact
center of 26 (now a
farm house) and
then NE to hill
across small valley

Receptaculites cc
more scattered above
horizon in which
Peltandra and
Dalmatella vogata
are very common

W.T. Jackson farm 2 1/2 mi
NE of Frankford W of Penn creek.
Peltandra cc
Dalmatella vogata cc
Dennstius meadsi
Bryggmanopis
Cerasurus
Lichas crucifer

Receptaculites, no flor^t
but certain are found
above the horizon with
fruits listed above.

Henry Hamilton 3 1/2 mi
due E of Frankford

S of Frankford
Smooth bisulcate (try pod)
Cerasurus hypostoma
Strophiolema in curvata
Winkles on Strophiolema

Base of Rimer's ridge
Dennstius meadsi X
Dalmatella vogata ?
Rhynchium more or less bare

W.H. Bishop, 3 mi SW McCome, $\frac{1}{2}$ mi West.
9 Grandford, up w. fr.
of Peno creek.

Spirifer or common
W of New London.

Fine grained blue
limestone of Lemo
Dermian. No fossils
5 ft sandstone in layer
1 to 2 inches thick, in
4 miles

50 ft estimated thickness
of Cincinnati at shale.
4 ft coarse grained l.
with *Illaenus* with large
eyes and occipital
furrow between eyes
forming long brows.
Also what looked like
Helicites in pression
but not certain.

T. of Rimmerwick =
white limestone with
large *Gryphaea*
major, *Machina*,
but no *Receptaculites*,
will further down
the section.

McCome, $\frac{1}{2}$ mi West.

Spiriferina angula large
Strophidium *Asym* \times
Spiriferina lemniscella ord.
• *Bivalvatum* type.

Drepanites fluctus ? \times
Receptaculites \times

Illaenus americanus

B. Milling Green 2 W and
and 3 mi N = Owen.

Rimmerwick 2 1/2 mi NW of
Lemore, in bed of stream.

Annie & Miller 3 mi
S of McCome. ($\frac{1}{4}$ mi
S of church.)

Dermia faulted
against over Bullfrog

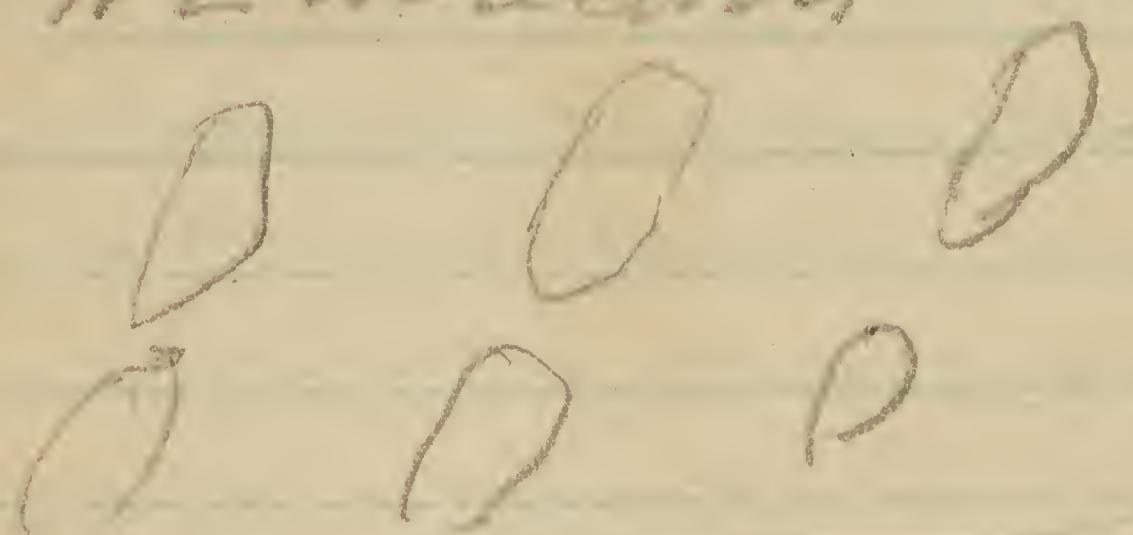
Coal from tailor
Gryphaea trap
Ostrich egg broken
Yellow grit in *Gryphaea*
at deposit and go in
and dredge at B. Milling Green

48 Environs New York
OSTRICH EGGS

at West End are cross-
ripped limestone blocks
with 5 elevations in length
of 8 inches, at top of
recrystallized layer.

The ostrich eggs are
above the recrystallized layer,
in a sandstone grainular
rock.

at this West End the
fine grained rock is
apparently folded over
the eggs which run
a NE direction. The eggs
are elongated in a
NE direction.



This elongation
takes place in a NE
direction over at the
soft end of the
expansile drift here
the eggs are clean

49 together.

The ostrich egg layer is
 $1\frac{1}{2}$ ft thick, including
the surface part
of the eggs.

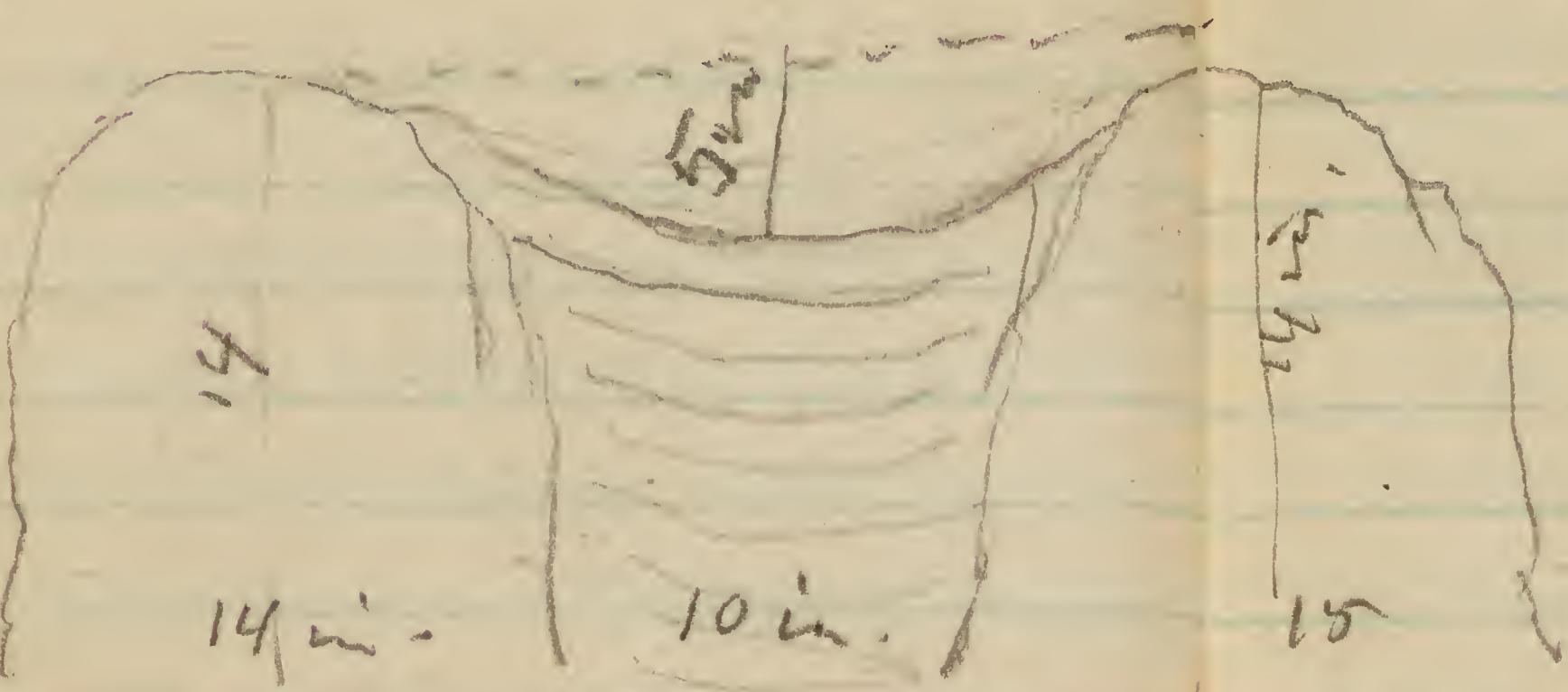
Numerous eggs from
 $\frac{1}{2}$ where they are
common to 2 ft occa-
sionally in their
shorter diameter.

Those we fit in diameter
and less for those up
less than $\frac{1}{3}$ of the
total number.

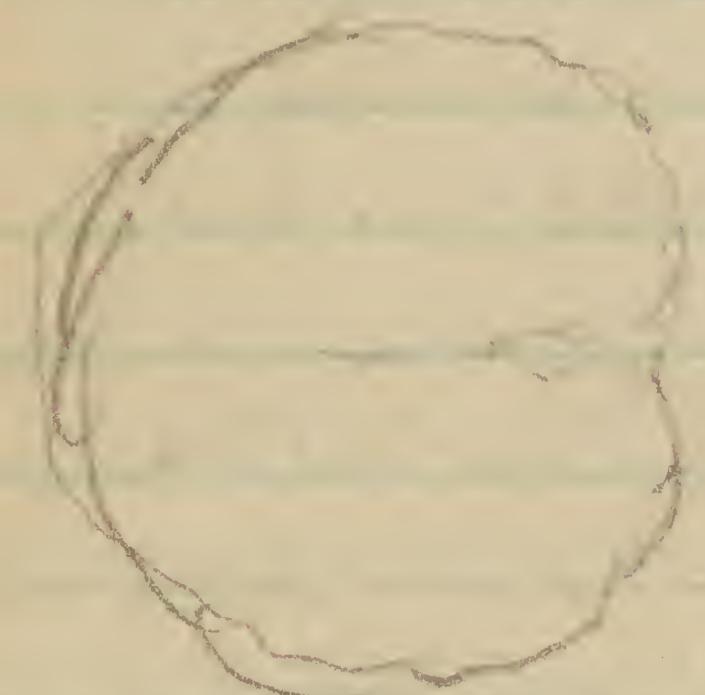
Ratio of length to width
= 2 to 3 for the round
ones, 3 to 1 to 2
in more elongated
ones.

Extant eggs from
5 inches, to 12 and 18
inches.

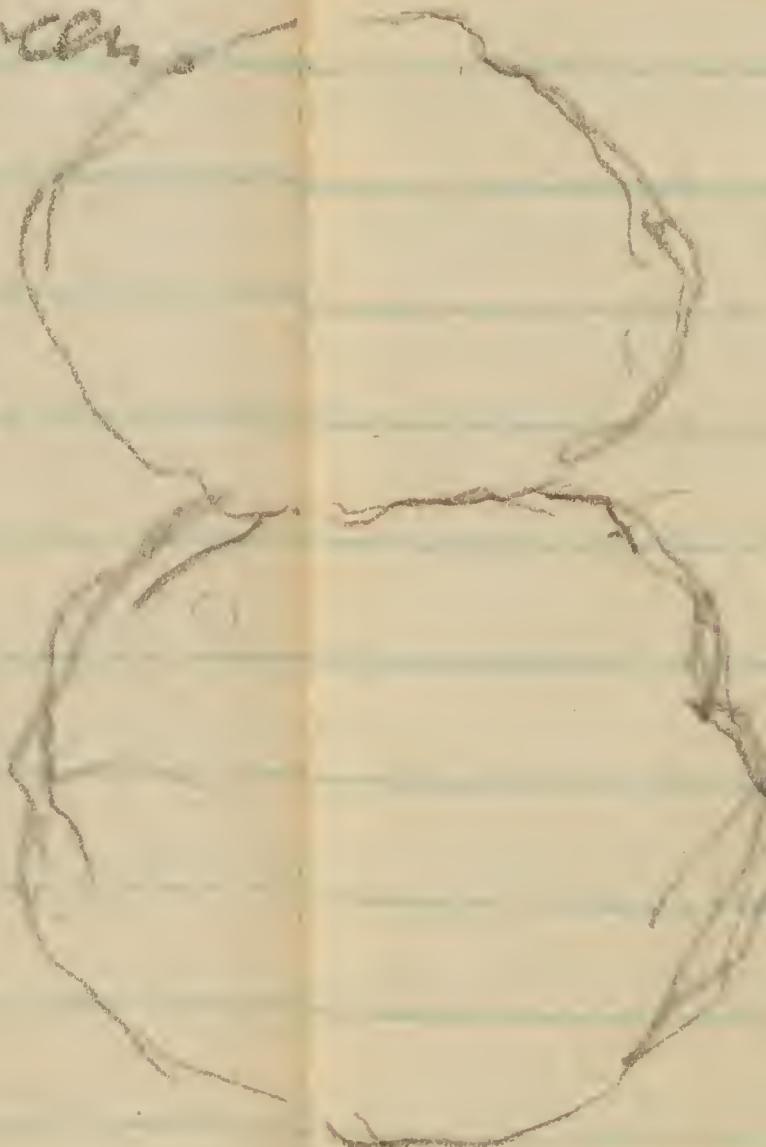
Ostrich eggs in
Charles Brown farm
8 of these about 100 gds



Shows that egg shell grew vertically, followed by deposition of mud.



Same as above.



Frankford 3 mi E to
Richmond branch
with following species
Diplopeltis sub quadrata
Ctenostomaria? &
Raphigyrina

1/6 mi east of crossroad

Sugar Creek
4 1/2 mi east of
Frankford
Isthmopora
major, found
by Wagman

Receptaculites -
Tritylites

Is any Platyline
in Pitt Co?

What are
Wagman's
mudcrusts?
Where can I
find good bed
sites for each.
What is the
tribofauna found,

West of Marion & W. Ira, 17th

Bowling Green 20 or 25 ft.
Cyrene Watson
Watson x Cyrene *
Nox x

Spring at Grasham's
Cyrene on Watson's front
front

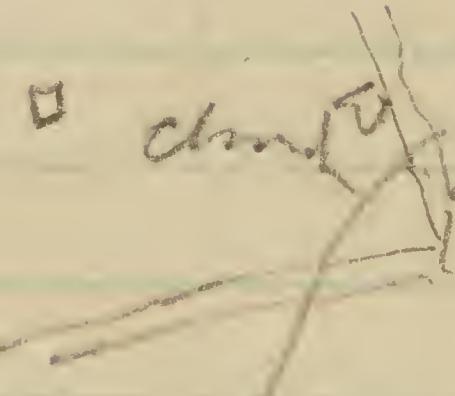
Cyrene on Cal Wagginer
place Schmidhauser &
Almonette,

Watson = Atayka

Edgewood far plenty
of trails go down
to John McCunes
house and then toward
split and down hill
from barn, toward
creek, go down to
fork and go up a
next fork, with
3/4 mi of Edgewood

Rare white in Gordon
place near Calumet P.O.,
in bed of branch, a
bit of magnolia

about 3 or 4 feet
above base, Behind
his apple orchard



or about
to house, then N
of house, at foot of
slope.



Auburn chit beds
below Recepile auto
beds.

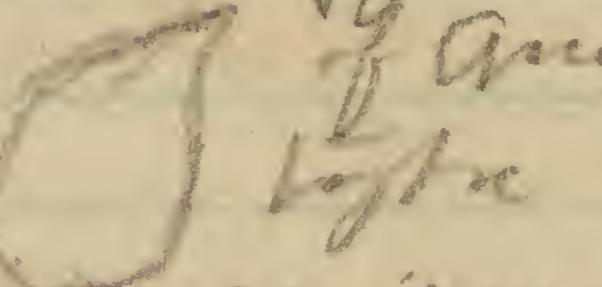
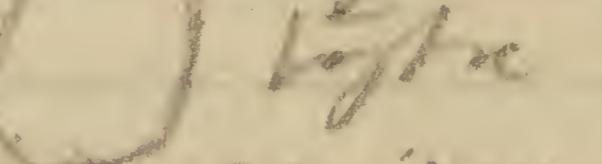
Dalmatella peruviana
Auburn is in flood,
wint.,
Sulphur creek S.E.
of Ashley.

Auburn's other side
of these West mes.

54 B reading Creek ^{Precip.}
7.10 am 3,080 m S cutt. 6,00
12.15 N 9,080 m North.

To Yellowstone from B Cr.
9.10 am. 1.40 PM 11,200 m.

Bring West

1.45 am 1.10 PM 5,500 m,
Antrim gray. $\frac{1}{4}$ mi
N of Antrim off Downing
Tone like  of Antrim
Tritylites 
Rafinesqueanum
+ Helictites
Cylindrites with no surface
Strophomena monata
Liopeltis
Strophomena
Hesperidites dolomites
Bally road.
Wavy cylindrical
of wavy structures with
I didn't cut except a few which
may be Belemnites.

Eph Downing gray
E side of state line
Road N of Toll gate
N of Antrim.

55

Silver.

Burlington at quarry on
hill 1/4 mi S E of town on
E side of railroad, just beyond
creek. Two fossils left on
crest of style cliff.

Edgewood locality.

From Edgewood cross
track. N, just E of depot,
and follow road E to
John McGuire house, on
W side of road, just before
reaching bend of road
toward SE. Along this
SE part of road is
exposed white limestone
stone supposed to be
Chautaukia limestone
by me (mapped as Niagara)
White road goes E again
is greenish clay shale
containing *Spiriferina*,
and regarded as Hamlet
shale Cenozoic in
nature.

Fossils shipped packed
Ludlowa May 22,
2 packages, trilobite.

Cyrene

Falls E corner of town

Lava road north of east

Hole Boulders is exposed

(Chittenango & Hamlet
in exposed)

Proff R R overlay

1. Lithology of Chittenango

2. Chittenango Silex

3. Good exposures near

Whitewater?

4. Edgewood. May not be

5. Cyrene E of airport (4 in)

6. Took fossil locality

for Hudson river

7. Devonian limestone
in Pike Co., where?

8. Black slate, where?

9. Gneiss

10. Purling Brook fossils

11. Dev. Boulders

12. Granite in Dr. base
of Purling Brook

13. Sh. boulders (3 in)

14. Sh. boulders (3 in)

57

Hagans blacksmith shop,
corner to Spaulding Springs

1 ft not exposed.

1 ft. Receipt acritites.

(*Diplopodina major* or *medium size*.
Madure large. Platyceraspis oblonga.
1/2 ft Receipt acritites.)

← *Streptelasma communis* 1 ft

1/2 ft Receipt acritites in it. *

← *Spirifer gibbosus*, large

1 1/2 ft white fine grained

← Receipt acritites. *

Top continuous section

2 1/2 ft sandy bedded Dev. L.

50 mm ovoid lense.

14 ft fine grained Dev. limestone

5 ft clay shale. Hudson river,

6 inches hard sandstone Dev.

1/2 ft probably clay shale.

1 ft Rather coarse grained ss.

white limestone pebbles.

1 ft Sandstone with fine grained

RK

Small Dor. ss, thin
out SW over the ~~42-2~~
Upper Devonian ss,
thickens SW, 4-20 ft.
East edge section 19.
On W. S. Sandstone farm

3 ft Devonian blue dolom.
Irreg. irregularly bedded
Dev. limestone.

1 1/2 ft. clay shale. Dor.
1 ft sandstone. Dor.
C. H. Lenox, near center of
section 19.

at first three & E of house founded
crossing. W of creek.

Farmiles. W. of N + S road.
Limestone collected in before.

is rich ledge
West 2 mi. at home of Abe
distance 1/2 mile

Dev. Sandstone (20 ft thick)
exposed almost as far as a. o.
8 ft sandstone forming cliff -
2 ft dense limestone. Recryst.
irregularly bedded
3 ft sandstone + shales.
2 1/2 ft sh. sh. a. sandstone
Breciated l.
5 ft Limestone

New Franklin N across
Salo river, then N 2 miles
to where stream crosses
road in south edge of
section 13 on Huley
Henderson farms
Top of Devonian l.
exposed by bridge
Then go down about
20 feet to exposure
in stream SW of
Abe house,
and about on a level
with front of the NW of
foundation of house,
house no longer. In
this creek level is
abundant Marcella
and some other
lower lithologies
and a few Spec. l.
This locality is about
1/4 mi S down creek
Then go to foot of
tree mounted above
Here is fossil Warren
dol. again.
Then go down about
10 feet to just beyond
that road crossing

Here *G. monticola* is common. But branching form is only a variant of the more glabrate form given. The latter is strongly nodose.

Then for about about 25 feet to point S of a P. Madding.

Here is base of brecciated Deb. L. A short distance further south *G. salsif.* is top of Deb. ss.

This ss. may be 24 feet thick and to exposed as far as point E of C.H. Lentz house.

Beln this is at least 4 feet limestone also recorded as Deb. ss. since it is brecciated, but it might be Cer. nician. See page 58 for additional notes on basal portion.

Hawley Henderson farm above D. er. l. and under a fine grained sandstone which is about 6 inches of material, near middle of which is 1 in. layer of thin shaly coal.

Bridgeman Care

Protogenia bipunctata

Ceramus n. sp.

Schizocrania

Plectostomites sericeus

Oithis bicarinata

Sheld

Spalding Spgs 1 mi N + $\frac{1}{2}$ miles W along straight lines to Accrington bed 4 mi E of Sheld.

Do Lath. on Accrington Spalding Spgs $2\frac{1}{2}$ mi and 1 mi W to locality

Spalding Spgs
New London 2 mi N then $6\frac{1}{2}$ mi W on straight lines W.

62

Abe McFarland &
Homer Henderson

Hudson River shale
Near Gondwan NE to
crossing over S. east
river, W of RR, then
angling NE to salt
River. Sm 'tch Sta-
tion, then E 1½ mi,
Smy' 2000 ft.

or

Near Gondwan 2½ mi
SW along N, then
2 mi straight E in
eastern half of 27,
somewhere.

Very bedded
yellowish limestone
becomes above thin
Hudson river shale
mostly a sandy
somewhere near
Wine Brook's
place

Judge Spalding
Dr. Gallagher
orally St Peters

63

Sheppard vs Snow
Underground
Water of Mar.
Refus to it as
St Peters.

Gravelly Swallow.

64

65

72

E 1959 Diary



GENUINE LEATHER

1262

